

REMARKS

Claims 13-15 are pending in the application. This Amendment currently amends claim 13, cancels claims 1-12 without prejudice or disclaimer, and adds new claims 14 and 15. No new matter is added to currently amended claim 13, or to new claim 14 and 15. Claim 13 is amended to merely clarify the subject matter of the claim and in no way narrows the scope of the claim in order to overcome the prior art or for any other statutory purpose of patentability.

Notwithstanding any claim amendments of the present Amendment or those amendments that may be made later during prosecution, Applicants' intent is to encompass equivalents of all claim elements. Reconsideration in view of the foregoing amendments and the following remarks is respectfully requested.

Claims 1-13 stand rejected under 35 U.S.C. §103(a) as unpatentable over U.S. Patent No. 5,877,558 to Nakamura et al. (hereinafter, Nakamura) in view of U.S. Patent No. 4,152,624 to Knaebel.

Applicant respectfully traverses this rejection.

THE PRIOR ART REJECTION

Nowhere does the prior art of Nakamura and Knaebel, either individually or in combination, teach or suggest a heat treatment carried out for a time of $T \geq -1.7H + 124$, where T and H represent time and an absolute humidity, respectively, as disclosed in claim 13 of the present invention. That is, the prior art fails to disclose, teach or suggest carrying out a heat treatment by using (H, T), which is shown by the region indicated by oblique lines in Fig. 6 of the present invention.

Fig. 6 of the present invention is a graph in which results of the experiment of Fig. 5 are plotted, wherein the relative humidity values in Fig. 5 are converted into values of absolute humidity (KPa). The graph of Fig. 5 further shows that minimum heat treatment times for groups (3) and (4), whose light-emitting characteristics remained unchanged even when the heat treatment time was shorter than 200 hours (Specification, [0086]).

As is apparent from this graph, a curve serving as a boundary between a region

including the samples whose light-emitting characteristics changed due to the high-load durability test and a region including the samples whose light-emitting characteristics did not change due to the high-load durability test is a monotonically decreasing function (Specification, [0087]).

In addition, as admitted by the Examiner, Nakamura shows a GaN LED with a protective film, covering the entire surface except for the electrodes, to improve the reliability of the device. In contrast, the encapsulant of Knaebel provides a uniformly illuminated area. Therefore, there is no motivation to combine the encapsulant of Knaebel, having improved properties of illumination, with the properties of the protective film of Nakamura for improving reliability. Hence, there would have been no motivation to continue the references, and even assuming arguendo that the references would have been combined, the invention of claims 13-15 would not have been produced.

CONCLUSION

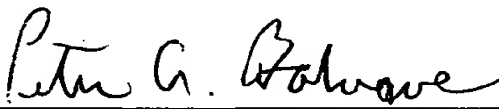
In view of the foregoing, Applicant submits that claims 13-15, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,

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